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Claims

1. A composition comprising:

(a) one or more copolymers selected from the group consisting of (I) a copolymer of ethylene and vinyl acetate containing about 10 to about 50 percent by weight vinyl acetate and having a melt mass flow rate of about 1 to about 100 grams per 10 minutes; (II) a copolymer of ethylene and ethyl acrylate containing about 10 to about 50 percent by weight ethyl acrylate and having a melt mass flow rate of about 1 to about 100 grams per 10 minutes; and (III) a copolymer of ethylene and butyl acrylate containing about 10 to about 50 percent by weight butyl acrylate and having a melt mass flow rate of about 1 to about 100 grams per 10 minutes, and based upon 100 parts by weight of component (a):

(b) about 55 to about 200 parts by weight of a linear copolymer of ethylene and an alpha-olefin having 3 to 12 carbon atoms, the copolymer having a melt mass flow rate of about 0.1 to about 30 grams per 10 minutes and a density of 0.870 to 0.944 gram per cubic centimeter;

(c) about 5 to about 50 parts by weight of polypropylene having a melt mass flow rate of about 0.5 to about 30 grams per 10 minutes and a density of 0.900 to 0.920 gram per cubic centimeter;

(d) about 2 to about 50 parts by weight of an organopolysiloxane having the following formula: $R^1_x R^2_y SiO_{(4-a-b)/2}$

wherein R^1 is an aliphatic unsaturated hydrocarbon group; R^2 is an unsubstituted or substituted monovalent hydrocarbon group excluding aliphatic unsaturated hydrocarbon groups; x is equal to or greater than 0 but less than 1; y is greater than 0.5 but less than 3; $x+y$ is greater than 1 but less than 3; a is greater than 0 but equal to or less than 1; and b is equal to or greater than 0.5 but equal to or less than 3;

(e) about 10 to about 350 parts by weight of carbon black; and

(f) optionally, up to about 2 parts by weight of an organic peroxide.

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2. The composition defined in claim 1 wherein the ester in component (a) is present in an amount of about 15 to about 40 percent by weight..

3. The composition defined in claim 1 wherein the components are present in the following amounts:

(b) about 75 to about 100 parts by weight;

(c) about 15 to about 30 parts by weight;

(d) about 2 to about 10 parts by weight;

(e) about 40 to about 300 parts by weight; and

(f) about 0.15 to about 0.8 part by weight.

4. The composition defined in claim 1 wherein component (b) is LLDPE or VLDPE.

5. The composition defined in claim 1 wherein component (d) is a silicone gum or a silicone oil.

6. The composition defined in claim 1 wherein component (e) is Ketjen black..

7. The composition defined in claim 1 wherein the organic peroxide has a 10 minute half life at 100 to 220 degrees C..

8. A cable comprising an electrical conductor or a core of electrical conductors surrounded by a moisture cured insulation layer, which is surrounded by, and contiguous with, a semiconductive layer, said semiconductive layer comprising:

(a) one or more copolymers selected from the group consisting of

(I) a copolymer of ethylene and vinyl acetate containing about 10 to about

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50 percent by weight vinyl acetate and having a melt mass flow rate of about 1 to about 100 grams per 10 minutes; (II) a copolymer of ethylene and ethyl acrylate containing about 10 to about 50 percent by weight ethyl acrylate and having a melt mass flow rate of about 1 to about 100 grams per 10 minutes; and (III) a copolymer of ethylene and butyl acrylate containing about 10 to about 50 percent by weight butyl acrylate and having a melt mass flow rate of about 1 to about 100 grams per 10 minutes, and based upon 100 parts by weight of component (a):

(b) about 55 to about 200 parts by weight of a linear copolymer of ethylene and an alpha-olefin having 3 to 12 carbon atoms, the copolymer having a melt mass flow rate of about 0.1 to about 30 grams per 10 minutes and a density of 0.870 to 0.944 gram per cubic centimeter;

(c) about 5 to about 50 parts by weight of polypropylene having a melt mass flow rate of about 0.5 to about 30 grams per 10 minutes and a density of 0.900 to 0.920 gram per cubic centimeter;

(d) about 2 to about 50 parts by weight of an organopolysiloxane having the following formula: $R^1_x R^2_y SiO_{(4-a-b)/2}$

wherein R^1 is an aliphatic unsaturated hydrocarbon group; R^2 is an unsubstituted or substituted monovalent hydrocarbon group excluding aliphatic unsaturated hydrocarbon groups; x is equal to or greater than 0 but less than 1; y is greater than 0.5 but less than 3; $x+y$ is greater than 1 but less than 3; a is greater than 0 but equal to or less than 1; and b is equal to or greater than 0.5 but equal to or less than 3; and

(e) about 10 to about 350 parts by weight of carbon black.

9. The cable defined in claim 8 wherein component (d) is grafted to one or more of components (a), (b), and (c).